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10/047,631 F/D= 10/23/01

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FILE 'USPATFULL' ENTERED AT 11:01:48 ON 06 NOV 2003 CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS) FILE COVERS 1971 TO PATENT PUBLICATION DATE: 4 Nov 2003 (20031104/PD) FILE LAST UPDATED: 4 Nov 2003 (20031104/ED) HIGHEST GRANTED PATENT NUMBER: US6643843 HIGHEST APPLICATION PUBLICATION NUMBER: US2003204891 CA INDEXING IS CURRENT THROUGH 4 Nov 2003 (20031104/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 4 Nov 2003 (20031104/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2003 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2003 >>> USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< <<< >>> /PK, etc. >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< <<< >>> enter this cluster. <<< >>> <<< >>> Use USPATALL when searching terms such as patent assignees, >>> classifications, or claims, that may potentially change from <<< <<< >>> the earliest to the latest publication. This file contains CAS Registry Numbers for easy and accurate substance identification. => d his (FILE 'HOME' ENTERED AT 11:01:36 ON 06 NOV 2003) FILE 'USPATFULL' ENTERED AT 11:01:48 ON 06 NOV 2003 => s octoxyglycerin and antimicrob? 27 OCTOXYGLYCERIN 30490 ANTIMICROB? 25 OCTOXYGLYCERIN AND ANTIMICROB? T.1 => s 11 and pd 2000 71470 PD 304605 2000 35 PD 2000 (PD(W)2000) 0 L1 AND PD 2000 L2 \Rightarrow s 11 and \Rightarrow 2000 MISSING TERM 'AND <PD' The search profile that was entered contains a logical operator followed immediately by another operator. => s 11 and pd<20002608081 PD<2000 (PD<20000000) 1 L1 AND PD<2000 T.3

=> d 13 ab,bib,kwic

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ANSWER 1 OF 1 USPATFULL on STN
L3
       The invention comprises a liquid composition which provides a drier feel
AB
       and reduced leakage when used with certain types of applicators,
       especially an applicator having a porous surface, which composition is
       made by combining an active phase and a silicone phase. The active phase
       is made by combining: (a) 10-70% of a selected glycol; (b) 0.1-10% of a
       nonionic emulsifier having an HLB greater than 8; (c) 0.01-30% of a
       cosmetically active ingredient; and (d) 0-20% of ethanol and/or
       isopropanol. The silicone phase is made by combining: (a) from 0.1-10%
       of a selected emulsifier; (b) 0-30% of a non-volatile silicone; (c)
       0-30% of a volatile silicone; and (d) 0-25% of an organic emollient;
       provided that: (a) the silicone phase contains at least 10% silicone;
       (b) the ratio of silicone phase to active phase is in the range of 1:1
       to 1:4; and (c) the composition is processed to maintain a viscosity in
       the range of 2,000-200,000 centipoise ("cps").
       1999:150634 USPATFULL
AN
       Antiperspirant formulation for porous applicator
ΤI
       Schamper, Thomas, Cranbury, NJ, United States
TN
       Moghe, Bhalchandra, White House Station, NJ, United States
       Barr, Morton L., East Brunswick, NJ, United States
       Wu, Ching-Min Kimmy, Kendall Park, NJ, United States
       Colgate-Palmolive Company, New York, NY, United States (U.S.
PA
       corporation)
                                                                     <--
       US 5989531
                               19991123
PΙ
                               19981113 (9)
       US 1998-191897
ΑI
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Dodson, Shelley A.; Assistant Examiner: Lamm, Marina
       Miano, Rosemary M.
LREP
       Number of Claims: 18
CLMN
       Exemplary Claim: 1
ECL
       No Drawings
DRWN
LN.CNT 1083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
                                                                     <--
                               19991123
PΙ
       US 5989531
       (c) effective amounts of antimicrobial agents, for example,
SUMM
       0.01-1.0 percent by weight based on the total weight of the composition;
       examples include bacteriostatic quaternary ammonium compounds (such as
       cetyl trimethyl-ammonium bromide, and cetyl pyridinium chloride), 2, 4,
       4'-trichloro-2'-hydroxydiphenylether (Triclosan), N-(4-chlorophenyl)-N'-
       (3,4-dichlorophenyl)urea (Triclocarban), silver halides,
       octoxyglycerin (SENSIVA.TM. SC 50) and various zinc salts (for
       example, zinc ricinoleate). Triclosan or Triclocarban can,
       illustratively, be included in an.
       (b) from 0.1-5% of fragrance, color, preservatives,
SUMM
       antimicrobial agents.
         . . to reduce malodor by reducing perspiration; the antiperspirant
SUMM
       active materials can also have a deodorant function, for example, as an
       antimicrobial or bacteriostatic agent. The deodorant active
       materials do not substantially reduce perspiration, but reduce malodor
       in other ways. For example, as fragrances masking the malodor or
       reducing the malodor intensity; absorbents; antimicrobial
       (bacteriostatic) agents; or agents chemically reacting with malodorous
       materials.
       What is claimed is:
CLM
          the cosmetically active ingredient is a deodorant active selected
       from the group consisting of deodorizing amounts of: (a) fragrances; (b)
       antimicrobial agents; and (c) antiperspirant agents.
```

```
=> s 14 and quarternary ammonium and chlorhexidine
          4869 QUARTERNARY
        260196 AMMONIUM
          2976 QUARTERNARY AMMONIUM
                 (QUARTERNARY (W) AMMONIUM)
          4005 CHLORHEXIDINE
             O L4 AND QUARTERNARY AMMONIUM AND CHLORHEXIDINE
L5
=> s 14 and chlorhexidine
          4005 CHLORHEXIDINE
             2 L4 AND CHLORHEXIDINE
1.6
=> d 16 1-2 bib, ab, kwic
     ANSWER 1 OF 2 USPATFULL on STN
L6
ΑN
       2003:219354 USPATFULL
       Gentle-acting skin-disinfectants
ΤI
       Modak, Shanta, Riveredge, NJ, UNITED STATES
TN
       Gaonkar, Trupti A., New York, NY, UNITED STATES
       Sampath, Lester, Nyack, NY, UNITED STATES
                               20030814
       US 2003152644
                         A1
PΙ
                               20011023 (10)
       US 2001-47631
                          Α1
ΑI
DT
       Utility
       APPLICATION
FS
       BAKER BOTTS L.L.P., 44TH FLOOR, 30 ROCKEFELLER PLAZA, NEW YORK, NY,
LREP
       10112-0228
       Number of Claims: 40
CLMN
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 1109
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Antimicrobial compositions having synergistic combinations of
AΒ
       octoxyglycerin and at least one other antimicrobial agent in
       formulations which are more effective than prior art compositions
       without causing increased irritation to the skin of the average user. In
       certain embodiments, skin irritation may be minimized by low
       concentrations of antimicrobials and/or the presence of soothing
       compounds such as zinc. Preferred embodiments include combinations of
       octoxyglycerin, a quaternary compound, and at least one other
       antimicrobial agent. Without being bound to any particular theory, it is
       hypothesized that the unexpected antimicrobial effectiveness of
       combinations of octoxyglycerin may result from an enhancement of the
       permeability of microbes to antimicrobials caused by octoxyglycerin.
            . present invention provides for skin-friendly antimicrobial
SUMM
       compositions comprising synergistic combinations of octoxyglycerin and a
       low concentration of an antibiotic, particularly chlorhexidine
       . In particular embodiments, the compositions further comprise a
       quaternary ammonium compound that enhances killing of microbes.
         . . No. 5,776,430 by Osborne et al., issued Jul. 7, 1998, discloses
SUMM
       a topical antimicrobial cleaner containing about 0.65 -0.85 percent
       chlorhexidine and about 50-60 percent denatured alcohol, which
       is scrubbed onto and then rinsed off the skin.
         . . protection for 3-4 hours after application. The composition
SUMM
       prepared according to the claims of U.S. Pat. No. 6,187,327 further
       comprises chlorhexidine digluconate.
       . . have a soothing effect on the skin. The claimed subject matter
SUMM
       includes formulations comprising a gel formed between zinc gluconate,
       chlorhexidine gluconate and a solvent, to which various
       thickening agents, emulsifying agents and/or emollients may be added.
       . . al., issued Jan. 6, 1998, relates to "Triple Antimicrobial
SUMM
```

```
Compositions" comprising less than or equal to two percent of a
       chlorhexidine compound, less than or equal to 0.1 percent of a
       quaternary ammonium compound, and less than or equal to two.
       [0013] Octoxyglycerin, sold under the trade name Sensiva.RTM.
SUMM
       SC50 (Schulke & Mayr), is a glycerol alkyl ether known to be gentle to
       the skin. Octoxyglycerine exhibits antimicrobial activity. .
       callunae, and Corynebacterium nephredi, and is used in various skin
       deodorant preparations at concentrations between about 0.2 and 3 percent
       (Sensiva.RTM. product literature, Schulke & Mayr).
       . . agent, namely polyhexamethylene biguanide (at a concentration
SUMM
       of between 0.01 and 0.5 percent), together with a polarity modifier such
       as Sensiva.RTM.SC50, at levels of typically 1-15 percent.
       Compositions disclosed in U.S. Pat. No. 5,885,562 may further comprise a
       short chain monohydric.
SUMM
       . . . Pat. No. 5,516,510 may be formulated in aqueous and/or
       alcoholic solutions and may further comprise additional antimicrobial
       compounds, including triclosan, chlorhexidine salts, alexidine
       salts, and phenoxyethanol, among others. Specific concentration ranges
       for triclosan and the biquanides are not provided.
       [0018] Octoxyglyerin, as used herein, is also known as glycerol
SUMM
       1-(2-ethylhexyl) ether and is sold under the trade name Sensiva
       .RTM. SC 50 ("Sensiva.RTM.") by Schulke & Mayr (Rockaway,
       N.J.). Octoxyglycerin has the following chemical structure:
       . . . the empirical formula C.sub.11H.sub.24O.sub.3. The CAS No. of
SUMM
       octoxyglycerin is 70445-33-9. Octoxyglycerin has a relative molecular
       weight of 204.31 g/mol. Sensiva.RTM. SC 50 is sold as a clear,
       almost colorless liquid, having a refractive index of approximately
       1.451, a density at. . . percent, and preferably 1-3 percent. It should be noted that all ranges recited herein are inclusive of their
       limiting values. Sensiva SC50 is essentially pure
       octoxyglycerin.
            . biguanide (PHMB) at concentrations between about 0.3 and 1\,
SUMM
       percent, alexidine at concentrations between about 0.5 and 2 percent,
       and chlorhexidine compounds at concentrations between about
       0.5 and 4 percent and preferably between about 0.05 and 1 percent. A
       chlorhexidine compound, as that term is used herein, includes
       chlorhexidine free base as well as chlorhexidine
       salts, including, but not limited to, chlorhexidine diacetate
       (also known as "chlorhexidine acetate"), chlorhexidine
       digluconate (also known as "chlorhexidine gluconate"),
       chlorhexidine palmitate, chlorhexidine
       diphosphanilate, chlorhexidine dihydrochloride,
       chlorhexidine dichloride, chlorhexidine dihydroiodide,
       chlorhexidine diperchlorate, chlorhexidine dinitrate,
       chlorhexidine sulfate, chlorhexidine sulfite,
       chlorhexidine thiosulfate, chlorhexidine di-acid
       phosphate, chlorhexidine difluorophosphate,
       chlorhexidine diformate, chlorhexidine dipropionate,
       chlorhexidine di-iodobutyrate, chlorhexidine
       di-n-valerate, chlorhexidine dicaproate, chlorhexidine
       malonate, chlorhexidine succinate, chlorhexidine
       malate, chlorhexidine tartrate, chlorhexidine
       dimonoglycolate, chlorhexidine monodiglycolate,
       chlorhexidine dilactate, chlorhexidine
       di-alpha-hydroxyisobutyrate, chlorhexidine diglucoheptonate,
       chlorhexidine di-isothionate, chlorhexidine
       dibenzoate, chlorhexidine dicinnamate, chlorhexidine
       dimandelate, chlorhexidine di-isophthalate,
       chlorhexidine di-2-hydroxynapthoate, and chlorhexidine
       embonate. Most preferably, the chlorhexidine compound is
       chlorhexidine digluconate a concentration between 0.05 and 4
```

percent.

```
SUMM . . . 1.0
                       percent
(Amerchol Corp.)
                                       0.5
                                              percent (volume/volume)
dimethicone
                                       0.25
                                              percent
Germall plus
(ISP Sutton Laboratories)
                                              percent (volume/volume)
                                       1.5
propylene glycol
                                              percent (volume/volume)
                                       1.0
glycerine
                                       23.13 percent (volume/volume)
water
                                         0.05 percent
 chlorhexidine digluconate
                                       1.0
                                              percent
phenoxyethanol
                                              percent
                                        0.12
BZK
                                         2
                                                percent (volume/volume)
  Sensiva SC50
where the gel may be applied to and rubbed over the skin to achieve its
antimicrobial effect.
2. An. . percent
(Croda, Inc.)
                                       0.4
Polawax A-31
                                               percent
(Croda, Inc.)
                                       0.25
                                              percent
polyethylene glycol
                                       63.5
                                              percent (volume/volume)
ethanol
                                       0.4
                                              percent
Glucam E-20
(Amerchol Corp.)
                                              percent (volume/volume)
                                       0.1
Silicone 225
(Dow Corning)
                                               percent (volume/volume)
                                         2.0
  Sensiva SC50
                                       1.0
                                              percent
phenoxyethanol
                                         0.05
                                               percent
  chlorhexidine digluconate
                                              percent
                                        0.12
Germall Plus
                                        0.2
                                              percent
(Sutton Laboratories)
3. An antiseptic aqueous formulation comprising:
zinc gluconate
                                              percent
                                       3.8
                                              percent
zinc stearate
hydroxy. . . 2.0
                       percent
                                       0.25
                                               percent
allantoin
                                       0.3
                                              percent
Germall Plus
(ISP Sutton Laboratories)
                                              percent (volume/volume)
                                       1.0
dimethicone
                                        81.48 percent (volume/volume)
water
PHMB
                                       0.3
                                              percent
                                       1.0
                                              percent
phenoxyethanol
                                              percent
                                        0.12
B7.K
  Sensiva SC50
                                                percent (volume/volume)
                                         2
4. An antimicrobial scrub gel comprising:
                                        30.5
                                               percent
water
                                       0.1
                                              percent
Ucare
(Amerchol Corp.)
hydroxy propyl methyl cellulose (K100) 0.2
                                              percent
(Dow. . 0.4
                   percent
(Croda, Inc.)
                                        1.0
                                               percent
propylene glycol
                                               percent (volume/volume)
                                        63.5
ethanol
Glucam E-20
                                        0.4
                                               percent
(Amerchol Corp.)
Masil SF 19 CG surfactant
                                       1.0
                                               percent
                                        1.0
                                              percent
phenoxyethanol
                                         1.0 percent (volume/volume) 0.05 percent
 Sensiva SC50
  chlorhexidine digluconate
                                              percent
                                        0.12
BZK
                                       0.2
                                               percent
Germall Plus
(Sutton Laboratories)
5. An antimicrobial scrub gel,
```

```
for example for pre-operative skin disinfection,
comprising:
                                               percent. . . gluconate
                                        35
ethanol
       0.5
              percent
                                        0.2
zinc oxide
                                               percent
                                        0.3
                                               percent
hydroxy methyl propyl
cellulose (K100M)
                                        0.25
                                               percent
Germall Plus
(ISP Sutton Laboratories)
                                               percent (volume/volume)
                                        5.0
hexanol
                                               percent
                                        1.0
PXE
                                                percent (volume/volume)
                                          1.5
  Sensiva
                                          0.05
                                                 percent
  chlorhexidine digluconate
with water added to 100 percent (approximately
21.2 milliliters/100 ml solution).
6. Another antimicrobial scrub gel,
for example for pre-operative skin disinfection,
comprising:
                                        23.28 percent (volume/volume)
water
Polyox WSR 205
                                        0.2
                                              percent
                                        0.2
U-care JR 400
                                               percent
                                               percent (volume/volume)
                                        65
ethanol (95%)
propylene glycol
                                        3
                                               percent
                                                 percent (volume/volume)
                                          2
  Sensiva SC50
                                        0.12
                                               percent
BZK
                                        1.0
                                               percent
phenoxyethanol
                                        5.0
                                               percent
povidone iodine
                                        0.2
Germall Plus
                                               percent
7. An antimicrobial soap comprising:
                                        51.2
                                               percent. . . 40
                                                                      percent
water
       (volume/volume)
                                        2.0
                                               percent
Pluronic F-87
(BASF)
                                        1.0
                                               percent
Masil SF 19 CG surfactant
                                        2.0
                                               percent
Cocamidopropyl betaine
(Witco Corp.)
                                        1.0
                                               percent
propylene glycol
                                              percent
                                        1.0
phenoxyethanol
                                         0.05
                                               percent
  chlorhexidine digluconate
                                              percent
BZK
                                        0.12
                                                percent (volume/volume)
  Sensiva SC50
                                          0.5
                                        0.2
Germall Plus
                                               percent
(Sutton Laboratories)
8. An antifungal cream comprising miconazole (1-2 percent),
  chlorhexidine digluconate (0.05-0.2 percent),
and Sensiva SC50 (1-3 percent) in a hydrophilic cream base.
9. A topical antiseptic ointment for wound care comprising
polymixin (0.3-1%), neomycin (0.1-0.5 \text{ percent}),
  chlorhexidine digluconate (0.05-0.2 percent), and Sensiva
       SC50
(1-3 percent) in a hydrophilic base.
10. A topical antiseptic ointment for burn wound care comprising
silver sulfadiazine (1-2 percent), chlorhexidine
digluconate (0.05-0.2 percent) and Sensiva SC50 (1-3 percent)
in a hydrophilic base.
DETD
       Sensiva+BZK
       [0035] Sensiva SC50 and/or benzalkonium chloride ("BZK") were
DETD
       added, in various concentrations, to the following alcohol gel base:
                                    65
                                             percent.
ethyl alcohol
DETD . . . of other additives, to bring the total volume to 100 percent
```

(typically requiring approximately 20-30 percent (volume/volume)). The amount of **Sensiva**, throughout the example section, is a volume/volume percentage.

DETD

. . . The foregoing method was used to determine the antimicrobial activities of formulations of the above alcohol gel base comprising either Sensiva SC50, BZK or combinations of Sensiva SC50 and BZK. The results for Sensiva SC50 used alone are shown in Table 1, and the results for Sensiva SC50, BZK and Sensiva SC50/BZK combinations are shown in Table 2.

TABLE 1

% Sensiva
0 0.5 1.0 2.0 3.0 5.0

% Sensiva
0 1.0 2.0 0 0
1.0 1.0 2.0 2.0
% BZK
0 0 0 0.12 0.19 0.5
0.12 0.19 .

DETD [0040] Tables 1 and 2 show that no significant antimicrobial activity against S. aureus was obtained with 2-5 percent **Sensiva**; the antimicrobial activity was not significantly different between 2, 3 and 5 percent of **Sensiva**. Similarly, 0.12 and 0.19 percent BZK exhibited minimal or no antimicrobial activity (Table 2). However, combinations of 1-2 percent **Sensiva** SC50 and 0.12-0.19 percent BZK showed 5000-33000 fold reduction in colony forming units compared to

control values (Table 2).

DETD Sensiva+Chlorhexidine Digluconate

[0041] Assays using the same gel base and protocol as set forth in Example 1 to test activities of Sensiva, chlorhexidine digluconate ("CHG"), and combinations thereof gave the following results, shown in Table 3.

TABLE 3

	🖁 Sensi	iva				
	0	0	0	0	1.0	1.0
1.0	2.0 % CHG	2.0	2.0			
0.5	0	0.05	0.25	0.5	0.05	0.25

DETD [0042] Thus, Sensiva SC50 (1-2 percent) and CHG (0.05-0.5 percent) used individually showed 9-35 fold reduction in colony counts as compared to control, whereas a combination of 1-2 percent Sensiva with 0.05-0.5 percent CHG showed 800-100,000 fold reduction. Thus, the combination of Sensiva and CHG appears to be synergistic. When benzalkonium chloride was added to formulation, the antimicrobial activity was improved still further,. . .

DETD Sensiva+Chlorhexidine Digluconate+BZK

DETD . . . Assays using the same gel base and protocol as set forth in Example 1 to test activities of combinations of **Sensiva**, **chlorhexidine** digluconate ("CHG") and BZK gave the following results, shown in Table 4.

TABLE 4

```
0
                                0
                                                 1.0
                                                           2.0
    % Sensiva
                                                 0.12
                                                           0.12
                       Ω
                                0.12
    % BZK
                                                 0.05
                                                          0.05
    % CHG
                       0
                                0.05
    Growth
                       1 .times. 10.sup.8.
       Combinations of Sensiva and Other Antimicrobials
DETD
       [0044] Since Sensiva does not exhibit potent microbicidal
DETD
       activity even at concentrations of between 3 and 5 percent, it is
       surprising that this compound exhibits synergism with
       chlorhexidine digluconate and BZK. Octoxyglycerin (
       Sensiva) has been reported to have the property of deeper
       penetration into the upper layers of the epidermis. Without being bound.
             by any particular theory, the mechanism of synergistic action may
       be explained as follows. When a bacterium is exposed to Sensiva
       and a second antimicrobial agent, Sensiva may penetrate
       through the bacterial cell wall and thereby compromise the bacterial
       transport system. This may result in increased uptake of the second
       antimicrobial agent. This mechanism would indicate that Sensiva
       would promote the antimicrobial effects of a diverse array of compounds,
       including quaternary ammonium compounds, biguanides, chlorinated
       phenols, metal salts,.
       [0045] Accordingly, the antimicrobial activity of various combinations
DETD
       of Sensiva and other antimicrobials was tested, using
       concentrations that fall within the recommended usage range for topical
       formulations. The following agents. . . were tested. Benzalkonium
       chloride (BZK) and benzethonium chloride (BZT) were tested as
       representative of the class of quaternary ammonium compounds.
       Chlorhexidine digluconate (CHG) and polyhexamethylene biguanide
       (PHMB) were tested as representative of the class of biguanides.
       Parachlorometaxylenol (PCMX) and triclosan (TC)were. . .
       [0046] Similar protocols were then used to test the antibacterial
DETD
       activity of Sensiva combined with chorhexidine digluconate and
       another antimicrobial agent. The results are shown in Table 6.
TABLE 5
                                                     fold reduction*
% Antimicrobial
                  % Sensiva
                                Growth (CFU/ml)
                                  1 .times. 10.sup.8 --
0 Control
                  0
                                  3 .times. 10.sup.6 33
                  2.0
n
BZK
                                1.6 .times. 10.sup.7 6.25
0.12
0.12.
       [0047]
DETD
TABLE 6
                                                     Fold Reduction
                                       Growth
                                                     Compared to
Antimicrobial
                            % CHG
                                       (CFU/ML)
                                                     Control
                Sensiva
                                       1.0 .times. 10.sup.8 --
                0
                            0
0
                                       3.0 .times. 10.sup.6 33
                            0
0
                2.0
```

DETD [0048] The data shown in Table 5 indicate that **Sensiva**, at a concentration of 2.0 percent, produced a 33-fold reduction in bacterial colony formation, and the antibacterial activity of the other antimicrobials tested, used alone, was less than or equal to 33-fold. Combination of these antimicrobials with **Sensiva** greatly

8.0 .times..

0.05

2.0

0

resulted in an antibacterial activity greater than what would have been expected, based on the inhibitory activity of either. . . The extent of this enhancement varied among antimicrobials; for example, the activity of quaternary ammonium compounds, used in combination with Sensiva, was observed to be 12,500 and 20,000-fold greater than control. The biguanides chlorhexidine digluconate and parahexamethylenebiguanide, in combination with Sensiva, produced an antimicrobial activity 12,500 and 25,000-fold greater, respectively, than control. Neomycin, in combination with Sensiva, exhibited an antimibrobial activity 100,000 greater than control. Thus, Sensiva has been demonstrated to enhance the antimicrobial effects of a wide variety of agents. The data shown in Table 6 further show that combinations of Sensiva and chlorhexidine digluconate with various antimicrobials exhibit a further enhancement in activity.

DETD . . . Assays using the same gel base and protocol as set forth in Example 1 to test activities of combinations of **Sensiva** and other antimicrobials gave the following results, shown in Table 7.

TABLE 7

control 2.5-4.2 .times. 10.sup.8 (without gel base) 0.5 4.0 .times. 10.sup.7 Sensiva 1.0 1.0 .times. 10.sup.7 BZK 0.019 8.0 .times. 10.sup.7 BZK + 0.019 2.0 .times. 10.sup.7 Sensiva 1.0 BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 1.1 .times. 10.sup.5 Sensiva 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5 CHG + 0.05 1.2 .times. 10.sup.5	Agent(s)	Concentrations	Growth (cfu/tube)
Sensiva 0.5 4.0 .times. 10.sup.7 Sensiva 1.0 1.0 .times. 10.sup.7 BZK + 0.019 2.0 .times. 10.sup.7 Sensiva 1.0 BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 2.0 BZK + 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			2.5-4.2 .times. 10.sup.8
BZK 0.019 8.0 .times. 10.sup.7 BZK + 0.019 2.0 .times. 10.sup.7 Sensiva 1.0 BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	-	0.5	4.0 .times. 10.sup.7
BZK + 0.019 2.0 .times. 10.sup.7 Sensiva 1.0 BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	Sensiva	1.0	1.0 .times. 10.sup.7
Sensiva 1.0 BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 2.0 BZK + 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	BZK	0.019	
BZK + 0.019 1.2 .times. 10.sup.7 Sensiva 2.0 BZK 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	BZK +		2.0 .times. 10.sup.7
Sensiva 2.0 BZK 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			_
BZK 0.12 1.6 .times. 10.sup.7 BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	BZK +		1.2 .times. 10.sup.7
BZK + 0.12 1.4 .times. 10.sup.7 Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5		_	
Sensiva 0.5 BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			
BZK + 0.12 8.0 .times. 10.sup.5 Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			1.4 .times. 10.sup./
Sensiva 1.0 CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			0.0 + 10 5
CHG 0.05 1.1 .times. 10.sup.7 CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5	- -		8.0 .times. 10.sup.5
CHG + 0.05 6.3 .times. 10.sup.6 Sensiva 0.5			1 1 +imog 10 sup 7
Sensiva 0.5			
			0.5 .cimes. 10.5dp.0
			1.2 .times. 10.sup.5
Sensiva 1.0			1.1 . ozmoż . 2005 up . o
PCMX 0.15 3.5 .times. 10.sup.8			3.5 .times. 10.sup.8
PCMX + 0.15 4.1 .times. 10.sup.5	_		
Sensiva 2.0	Sensiva	2.0	
TC + 0.3 1.0 .times. 10.sup.7	TC +	0.3	1.0 .times. 10.sup.7
BZK 0.12	BZK		
TC + 0.3 4.0 .times. 10.sup.3			4.0 .times. 10.sup.3
BZK + 0.12	BZK +		
Sensiva 2.0			0.0 +: 10 6
PCMX + 0.3 2.0 .times. 10.sup.6			2.0 .times. 10.sup.6
BZK 0.12 PCMX + 0.3 1.0 .times. 10.sup.3			1 0 times 10 sup 3
			1.0 .times. 10.sup.5
BZK + 0.12 Sensiva 2.0			
Miconazole + 1.0 1.0 .times. 10.sup.7			1 0 times, 10 sup.7
CHG 0.05			1.0 .cimes. 10.bap.,
Miconazole + 1.0 1.0 .times. 10.sup.3			1.0 .times. 10.sup.3
CHG + 0.05			
Sensiva 2.0			
PVI + 1.0 1.0 .times. 10.sup.7			1.0 .times. 10.sup.7
CHG 0.05		0.05	

```
1.0
                                             0
    PVI +
                            0.05
    CHG +
                              2.0
       Combinations of Sensiva, BZK, and Other Agents
DETD
       [0050] Again using the alcohol gel base and protocol described in
DETD
       Example 1, various combinations of Sensiva, the quaternary
       ammonium compound BZK, and other antimicrobials produced the results
       shown in Table 8.
TABLE 8
                       Concentration. . . gel base)
   Agent(s)
    Control
                                             1.2 .times. 10.sup.8
    (gel base)
                                             1.0 .times. 10.sup.8
    PXE
                       1.0
                       1.0
                                             2.0 .times. 10.sup.7
    PXE +
      Sensiva
                        1.0
                       1.0
                                             3.3 .times. 10.sup.5
                        2.0
      Sensiva
                       0.12
                                             4.0 .times. 10.sup.4
    BZK +
                       0.05
    CHG +
                         1.0
      Sensiva
  BZK +
                       0.12
                       0.05
    CHG +
                         2.0
      Sensiva
                       0.12
   BZK +
   CHG +
                       0.05
                         1.0
      Sensiva +
    PXE
                       1.0
    BZK +
                       0.12
                                             8.0 .times. 10.sup.3
    PHMB +
                       0.3
     Sensiva
                         1.0
                                             0
                       0.12
    BZK +
    PHMB +
                       0.3
                         1.0
      Sensiva +
                       1.0
    PXE
       . . The above data demonstrates that the addition of the phenol
DETD
       derivative, phenoxyethanol, enhanced the antimicrobial activity of
       several combinations of Sensiva and other antimicrobials.
       . . . for 24 hours at 37.degree. C. and bacterial colonies were
       counted. The results, which demonstrate sustained antimicrobial activity
       of the Sensiva formulations, are shown in Table 9.
TABLE 9
                                      Staphylococcus aureus CFU/patch
Group
0.12% BZK + 0.5%
                                      30
PXE + 0.05% CHG + 1.0% Sensiva
                                      20
0.12% BZK + 0.5%
PXE + 0.3% PHMB + 1.0% Sensiva
                                      1.3 .times. 10.sup.4
Prevacare
                                      1.1 .times. 10.sup.4
Gel Base (control)
                                      1.2 .times. 10.sup.5
Control
DETD Aqueous Sensiva Formulation
                                                     5.0 .times. 10.sup.8
     . . . base (control)
                                             2.0 .times. 10.sup.8
0.12% BZK
                                             1.0 .times. 10.sup.8
3.4 .times. 10.sup.8
1.0% PXE
0.5% PXE
1.0% Sensiva
                                             5.0 .times. 10.sup.8
0.05% CHG
                                             2.5 .times. 10.sup.8
                                             1.0 .times. 10.sup.7
0.3% PHMB
```

```
1.0 .times. 10.sup.8
  1% PXE + 1% Sensiva
                                            5.0 .times. 10.sup.6
0.05\% CHG + 1\% Sensiva
                                            1.0 .times. 10.sup.8
0.05% CHG + 1% PXE
                                            2.5 .times. 10.sup.6
0.12% BZK + 1% Sensiva
                                            1.2 .times. 10.sup.7
0.12% BZK + 1% PXE
                                            4.0 .times. 10.sup.4
0.12% BZK + 1% PXB + 1% Sensiva
                                            2.0 .times. 10.sup.5
0.12\% BZK + 0.5\%
PXE + 0.05% CHG
                                            2.7 .times. 10.sup.4
0.12% BZK + 0.5%
PXE + 0.05% CHG + 0.3% PHMB
0.12\% BZK + 0.5\%
PXE + 0.05% CHG + 1% Sensiva
0.12\% BZK + 0.5\%
                                            0
PXE + 0.3% PHMB + 1% Sensiva
                                            0
0.12\% BZK + 0.5\%
PXE + 0.05% CHG + 0.3% PHMB + 1%
  Sensiva
                                            8.0 .times. 10.sup.8
negative control (no base/no agent)
       [0055] The foregoing experiments indicate that the potentiation of the
       antimicrobial activity of agents by Sensiva occurs in aqueous
       solution, in addition to the results observed using alcoholic gels. A
       combination of BZK, biguanide (CHG or PHMB), PXE and Sensiva
       achieved complete kill of test bacteria within 15 seconds.
       . . . patches using the protocol set forth in Example 7. The results,
DETD
       which demonstrate enhanced sustained activity in the presence of
       Sensiva, are shown in Table 11.
TABLE 11
                                          Staphylococcus aureus
    Group
                                          (CFU/patch)
                                          2.0 .times. 10.sup.4
    0.12% BZK + 0.5%
    PXE. . . + 0.05\% CHG +
    0.3% PHMB
    0.12% BZK + 0.5%
                                          0
    PXE + 0.05% CHG + 0.3%
    PHMB + 1% Sensiva
    Aqueous Base (control)
                                          5.0 .times. 10.sup.5
    Negative Control (no agent/no base) 5.4 .times. 10.sup.5
       Alcohol Gels Containing Sensiva and Zinc Anti-irritants
       . . . 12, 1999 and U.S. Pat. No. 5,985,918 by Modak et al., issued
DETD
       Nov. 16, 1999). In alcohol gel formulations containing Sensiva
       , zinc compounds were added in irritation-preventing quantities and
       their antimicrobial effectiveness was tested. The formulation was as
       follows:
zinc gluconate. . . percent
                                   0.4
                                            percent
hydroxy methyl propyl
cellulose (K100M)
                                   3.5
                                            percent
zinc stearate
                                   0.2
                                            percent
allantoin
                                            percent (volume/volume)
dimethicone
                                   0.5
                                            percent (volume/volume)
propylene glycol
                                   1.5
                                            percent (volume/volume)
                                   1.0
glycerin
                                     1.5
                                             percent (volume/volume)
  Sensiva
                                   1.0
                                            percent
PXE
                                   0.12
                                            percent
BZK
                                   0.3
                                            percent
PHMB
      . . . shown in Table 12.
TABLE 12
```

```
Rapid
                                                         Sustained
                                       Activity
                                                         Activity
                                       (CFU/tube)
                                                         (CFU/patch)
Formulation
                                                         40
Zn Gluconate 2% + Zn
Stearate 3.5% + Sensiva 1.5% + PXE
1% + BZK 0.12% + PHMB
0.3% -containing cream*
                                                         9.2 .times. 10.sup.3
Prevacare
Cream Without Antimicrobials**
                                       2.8 .times. 10.sup.5 8.6. . . 2.3
       .times. 10.sup.5
*as comprised in the formulation set forth above in this example section.
**the formulation set forth above, omitting Sensiva, PXE, BZK and
       PHMB
                                                 percent (volume/volume)
                                        1.5
DETD
       . . distearate
                                   0.15
Ucare JR400
                                            percent
                                            percent (volume/volume)
                                   1.5
silicone (DC 1403)
Germall Plus
                                   0.25
                                            percent
PHMB
                                   0.3
                                            percent
                                   1.5
PXE
                                            percent
BZK
                                   0.12
                                            percent
                                     1.5
                                              percent
  Sensiva
DETD . . CFU/tube
                                CFU/tube
                                            1.0 .times. 10.sup.3 0
                              0
Zn gluconate 0.8% + Zn
oxide 0.2% + PHMB 0.3% +
PXE 1.5% + BZK 0.12% +
  Sensiva 1.5% gel*
                                            ND
                                                             ND
Prevacare
                              3.2 .times. 10.sup.5 5.0 .times. 10.sup.7 1.0
Alcohol Gel Without
       .times. 10.sup.7
Antimicrobials**
Control
                              8.0 .times. 10.sup.8 5.0. . . .times. 10.sup.8
*gel formulation set forth above in this example section.
**gel formulation set forth above, lacking PHMB, PXE, BZK and Sensiva
         . . percent (volume/volume)
    Polyquaternium 22
                         2.0
                                       percent
                                       percent (volume/volume)
    Pluronic Gel (F-87)
                         0.075
                         0.12
                                       percent
    BZK
    CHG
                         0.05%
                                       percent
    PXE
                         1.0
                           1.0
                                         percent (volume/volume)
      Sensiva
      . . 30.25 ml/100 ml).
DETD
TABLE 14
    Formulation
                                            S. aureus CFU/tube
    BZK 0.12% + CHG 0.05% +
    PXE 1.0% + Sensiva 1.0% foam (supra)
                                            2.0 .times. 10.sup.5
    Above Foam Without BZK, CHG,
    PXE or Sensiva
                                            3.9 .times. 10.sup.8
    Control
CLM
       What is claimed is:
       6. The composition of claim 5 wherein the biguanide compound is a
       chlorhexidine compound.
```

- 8. The composition of claim 7 wherein the biguanide compound is a chlorhexidine compound.
- . and 5 percent (volume/volume) octoxyglycerin, between 0.05 and 0.2 percent of benzalkonium chloride, and between 0.5 and 4 percent of chlorhexidine digluconate.
- 30. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of a chlorhexidine compound, and between 1 and 2 percent of miconazole.
- 31. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of a chlorhexidine compound, and between 0.3 and 1 percent polymixin.
- 32. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of a chlorhexidine compound, and between 0.1 and 0.5 percent neomycin.
- 34. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of a chlorhexidine compound, and between 1 and 2 percent silver sulfadiazine.
- 35. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of chlorhexidine digluconate, and between 1 and 2 percent of miconazole.
- 36. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of chlorhexidine digluconate, and between 0.3 and 1 percent polymixin.
- 37. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of chlorhexidine digluconate, and between 0.1 and 0.5 percent neomycin.
- 39. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.5 and 4 percent of chlorhexidine digluconate, and between 1 and 2 percent silver sulfadiazine.
- 40. An antimicrobial composition comprising between 1 and 5 percent (volume/volume) octoxyglycerin, between 0.05 and 2 percent of chlorhexidine digluconate, between 0.3 and 2 percent of phenoxyethanol, between 0.01 and 0.3 percent of a quaternary ammonium compound, and between.
- ANSWER 2 OF 2 USPATFULL on STN 2003:142841 USPATFULL L6
- AN
- ΤI Multiphase stick preparation
- Banowski, Bernhard, Duesseldorf, GERMANY, FEDERAL REPUBLIC OF IN Scholz, Wolfhard, Krefeld, GERMANY, FEDERAL REPUBLIC OF Bordat, Pascal, Mervilla, FRANCE
 - Poppl, Marion, Kaarst, GERMANY, FEDERAL REPUBLIC OF
- Henkel Kommanditgesellschaft auf Aktien, Duesseldorf, GERMANY, FEDERAL PA REPUBLIC OF (non-U.S. corporation)
- US 6569438 B1 20030527 PΙ

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WO 9923998 19990520
       US 2001-554304
                               20010214 (9)
ΑI
                               19981030
       WO 1998-EP6892
                           19971111
       DE 1997-19749760
PRAI
       Utility
DT
FS
       GRANTED
EXNAM Primary Examiner: Krass, Frederick; Assistant Examiner: Ostrup, Clinton
       Harper, Stephen D., Ortiz, Daniel, Hill, Gregory M.
LREP
       Number of Claims: 23
CLMN
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 598
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An improved stick preparation is provided which is made up of at least
AB
       two separate phases and at least one phase contains spherical polymer
       particles which can contain a pigment. The particles provide smoothness
       to the preparation and can be used to provide an interesting visual
       appearance to the stick.
       . . . perspiration-decomposing microorganisms or enzyme-inhibiting
SUMM
       substances which inhibit the perspiration-decomposing esterase enzyme.
       Suitable antimicrobial agents are, for example, 2,4,4'-trichloro-2-2'-
       hydroxydiphenyl ether (Triclosan.RTM.), chlorhexidine
       gluconate, phenoxyethanol, pentane-1,5-diol, hexane-1,6-diol,
       antimicrobial essential oils and farnesol. Suitable lipase inhibitors
       are, for example, triethyl citrate and triacetin. Perspiration-
       inhibiting. .
       7) Sensiva.RTM. SC 50
DETD
=> d his
     (FILE 'HOME' ENTERED AT 11:01:36 ON 06 NOV 2003)
     FILE 'USPATFULL' ENTERED AT 11:01:48 ON 06 NOV 2003
             25 S OCTOXYGLYCERIN AND ANTIMICROB?
L1
L2
              0 S L1 AND PD 2000
L3
              1 S L1 AND PD<2000
L4
             33 S SENSIVA
              0 S L4 AND QUARTERNARY AMMONIUM AND CHLORHEXIDINE
L5
              2 S L4 AND CHLORHEXIDINE
L6
=> s 14 and quarternary ammounium
          4869 QUARTERNARY
            85 AMMOUNIUM
             0 QUARTERNARY AMMOUNIUM
                 (QUARTERNARY (W) AMMOUNIUM)
             0 L4 AND QUARTERNARY AMMOUNIUM
L7
=> s 14 and quarternary ammonium
          4869 QUARTERNARY
        260196 AMMONIUM
          2976 QUARTERNARY AMMONIUM
                 (QUARTERNARY (W) AMMONIUM)
             0 L4 AND QUARTERNARY AMMONIUM
L8
=> file registry
COST IN U.S. DOLLARS
                                                  SINCE FILE
                                                                  TOTAL
                                                                SESSION
                                                       ENTRY
FULL ESTIMATED COST
                                                       23.06
                                                                  23.27
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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d 19

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN L9 10438-94-5 REGISTRY RN 1,2-Propanediol, 3-(octyloxy)- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME) CN OTHER NAMES: 1,2-Dihydroxy-4-oxadodecane CN 1-0-Octyl-rac-glycerol CN1-Octyl glyceryl ether CN 3-(Octyloxy)-1,2-propanediol CN3-Octyloxy-1,2-propylene glycol CN Glycerin 1-octyl ether CN Glycerol .alpha.-octyl ether CN Glycerol 1-octyl ether CN Octadiol CN CN Octoxyglycerin FS 3D CONCORD 113725-19-2 DR MF C11 H24 O3 COM CI BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, LC STN Files: IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)

OH | | HO- CH₂- CH- CH₂- O- (CH₂) 7- Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

102 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

103 REFERENCES IN FILE CAPLUS (1907 TO DATE)

8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file uspatentfull 'USPATENTFULL' IS NOT A VALID FILE NAME SESSION CONTINUES IN FILE 'REGISTRY' Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files that are available. If you have requested multiple files, you can specify a corrected file name or you can enter "IGNORE" to continue accessing the remaining file names entered. => d his (FILE 'HOME' ENTERED AT 11:01:36 ON 06 NOV 2003) FILE 'USPATFULL' ENTERED AT 11:01:48 ON 06 NOV 2003 L125 S OCTOXYGLYCERIN AND ANTIMICROB? L2 0 S L1 AND PD 2000 L3 1 S L1 AND PD<2000 L433 S SENSIVA

0 S L4 AND QUARTERNARY AMMONIUM AND CHLORHEXIDINE L5 2 S L4 AND CHLORHEXIDINE 1.6

T.7 0 S L4 AND QUARTERNARY AMMOUNIUM 0 S L4 AND QUARTERNARY AMMONIUM 1.8

FILE 'REGISTRY' ENTERED AT 11:10:03 ON 06 NOV 2003 1 S OCTOXYGLYCERIN/CN L9

=> s 10438-9405/rn

INCONSISTENT NUMERIC RANGE EXPRESSION '10438-9405' The lower limit in a numeric range must be given before the upper limit. For example, '5-1/C' is not valid. The correct form is '1-5/C'.

=> s 10438-94-5/rn1 10438-94-5/RN L10

=> d 110 bib, ab, kwic

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN T.10 RN 10438-94-5 REGISTRY

REFERENCE 1

139:296978 CA ΑN

A sapogenin or a natural extract containing it for the treatment of TТ oligoseborrheic dry skin

Rubinstenn, Gilles; Buan, Bruno ΤN

L'Oreal, Fr. PA

Fr. Demande, 23 pp. SO CODEN: FRXXBL

DTPatent

LΑ French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION N	O. DATE
PI	FR 2837704	A1	20031003	FR 2002-4072	20020402
	JP 2003300862	A2	20031021	JP 2003-98389	20030401
PRAI	FR 2002-4072	20020	402		

The present invention relates to the use of a compn. contg. at least a sapogenin, or a natural ext. contg. the sapogenin for the treatment of the oligoseborrheic dry skin or dry scalp. Cosmetic compns. can be used to treat the dry skin, in particular after menopause, or for the treatment of the disorders related to the oligoseborrheic dry skins, in particular of

the dermatitis. Preferred sapogenins are the hecogenin and the diosgenin. Thus, an ointment contained diosgenin 1, salicylic acid 1, glycerol monostearate 3, propylene glycol 12, petrolatum 82.9, and water qs to 100%.

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 6 ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE 2

```
139:185663 CA
ΑN
```

Zinc salt compositions for the prevention of mucosal irritation from ΤI spermicides and microbicides

Modak, Shanta M.; Gaonkar, Trupti; Caraos, Lauser IN

The Trustees of Columbia University in the City of New York, USA PA

PCT Int. Appl., 49 pp. SO CODEN: PIXXD2

DTPatent

English T.A

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FAN.CNT 1
                                                    APPLICATION NO. DATE
      PATENT NO.
                       KIND DATE
      ______
      WO 2003066001 A2 20030814
                                                    WO 2003-US3896 20030207
PΙ
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
                GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
                LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
                PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
                ML, MR, NE, SN, TD, TG
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PRAI US 2002-355549P 20020207

The addn. of low concns. of combinations of water-sol. org. salts of zinc to gels, creams, lotions or ointments can increase the ability of these products to reduce or prevent exogenous irritants from causing irritation of the underlying substrate. The addn. of low concns. of combinations of water-sol. org. zinc salts to these gels, creams, lotions or ointments also can reduce the irritation of skin or mucous membranes caused by the addn. of potentially-irritating substances such as spermicides, microbicides, fungicides or other therapeutic agents to the gel, cream, lotion or ointment. The advantages of this anti-irritant approach over others, which generally employ high concns. of single zinc salts, are the reduced potential for zinc toxicity, the reduced potential for toxicity related to zinc itself, and the preservation of the desirable biol. properties of potentially-irritating therapeutic substances added to the gel, cream, lotion or ointment. Gels incorporating 2 or more of Zn gluconate, In acetate, In lactate and In citrate reduced the irritant effects of Me salicylate in gel formulations.

REFERENCE 3

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ΑN
```

Cosmetic wipes comprising N-(3-chloroallyl)-hexaminum chloride TI

Delambre, Patricia; Touzan, Philippe; Simon, Pascal IN

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 16 pp. CODEN: EPXXDW

DTPatent

French LΑ

FAN.CNT 1

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APPLICATION NO. DATE
                    KIND DATE
     PATENT NO.
    EP 1269985 A1 20030102 EP 2002-291385 20020605
PΤ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                    A1 20021227 FR 2001-8284
A1 20030206 US 2002-175378
                                                            20010622
     FR 2826270
                                                            20020620
     US 2003027738
                     Α
                                          CN 2002-124871 20020621
     CN 1393191
                            20030129
                    20010622
PRAI FR 2001-8284
    A wipe for use in the cosmetic field comprises a water-insol. substrate
     and a compn. which is added to the substrate comprising an aq. soln. of
    N-(3-chloroally1)-hexaminum chloride. The compn. which is added to the substrate may contain at least a C1-4 alkyl parahydroxybenzoate and/or a
     salt of ethylenediamine tetra-acetic acid. The wipe is used for cleaning
     or removing make-ups from the skin and eyes and may be in humid or dry
     form.
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 5
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
REFERENCE 4
ΑN
    137:375012 CA
    Use of polyamide particles as anti-irritant agent in a cosmetic or
    dermatologic composition
    Creton, Isabelle
IN
    L'oreal, Fr.
PΑ
    Fr. Demande, 20 pp.
SO
    CODEN: FRXXBL
DT
    Patent
LΑ
    French
FAN.CNT 1
    PATENT NO. KIND DATE APPLICATION NO. DATE
                                          _____
    FR 2822376 A1 20020927 FR 2001-3955 20010323
EP 1247520 A1 20021009 EP 2002-290525 20020304
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    us 2002176843 A1
                            20021128 US 2002-101883 20020321
                                                          20020322
                                          JP 2002-81960
     JP 2002322019
                     A2
                            20021108
                    20010323
PRAI FR 2001-3955
     Polyamide particles are used as anti-irritant agent in a cosmetic or
     dermatol. compn. Formulation of a cosmetic emulsion contg. 8% Nylon-12 is
     disclosed.
REFERENCE 5
     137:371576 CA
AN
     Production of pulp sheet with good bulk density, whiteness, and optical
TI
     Hamada, Yoshito; Kubota, Kazuo; Hiraishi, Atsushi; Nishimori, Toshiyuki;
ΙN
     Takahashi, Hiromichi
PΑ
     Kao Corp., Japan
     Jpn. Kokai Tokkyo Koho, 12 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
                                         APPLICATION NO. DATE
     PATENT NO. KIND DATE
                                          _____
                      A2
    JP 2002327396
                                          JP 2001-132826 20010427
PΙ
                            20021115
PRAI JP 2001-132826 20010427
    Title process contains the steps of (A) increasing the anion concn. on the
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surface of pulp slurry for paper making and (B) then adding in the slurry the compds. (e.g., methylpolysiloxane KF96A-10) having dewatering rate [= (.alpha.0 - .alpha.)/.alpha.0 .times. 100; .alpha.0: water content in a wet pulp sheet without adding compds., .alpha.: water content in a wet pulp sheet after adding 5 parts of compds. in pulp 100 parts] .gtoreq.4, and capable of achieving .gtoreq.1 from improvement of (i) the std. bulk d. .gtoreq.0.02 g/cm3; (ii) the std. whiteness .gtoreq.0.5; and (iii) std. opacity .gtoreq.0.5, so that the pulp concn. in the slurry is controlled under 0.9 wt%.

REFERENCE 6

AN 137:371575 CA

TI Production of pulp sheet with good bulk density, whiteness, and optical opacity

IN Hamada, Yoshito; Kubota, Kazuo; Hiraishi, Atsushi; Nishimori, Toshiyuki; Takahashi, Hiromichi

PA Kao Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2002327395 A2 20021115 JP 2001-132825 20010427

PRAI JP 2001-132825 20010427

AB Title process contains the steps of (A) increasing the anion concn. on the surface of pulp slurry for paper making and (B) then adding in the slurry the compds. (e.g., methylpolysiloxane KF96A-10) having dewatering rate [= (.alpha.0 - .alpha.)/.alpha.0 .times. 100; .alpha.0: water content in a wet pulp sheet without adding compds., .alpha.: water content in a wet pulp sheet after adding 5 parts of compds. in pulp 100 parts] .gtoreq.4, and capable of achieving .gtoreq.1 from improvement of (i) the std. bulk d. .gtoreq.0.02 g/cm3; (ii) the std. whiteness .gtoreq.0.5; and (iii) std. opacity .gtoreq.0.5.

REFERENCE 7

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AN 137:315792 CA
```

TI Two-phase roll-on cosmetic product

IN Avendano, Esther; Urrutia-Gutierrez, Adriana; Lee, Wilson; Tang, Xiaozhong

PA Mex

SO U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATEN	T NO.		KI	ND	DATE			A	PPLI	CATI	ои и	ο.	DATE				
PI	us 20	 02155	 078	 A	_	2002	- 1024		U	s 20	01-8	- 3880	 2	2001	0420			
	US 65	11657		В		2003												
	WO 20	02085	320	Α	1	2002	1031		M(0 20	02-U	S119	23	2002	0417			
	W	: AE	, AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO	, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM	, HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS	, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		\mathtt{PL}	, PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA	, UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	R	W: GH																
			, DE,															
		BF	, BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	

20010420 PRAI US 2001-838802

A two-phase roll-on antiperspirant and/or deodorant comprises: (a) a clear, translucent or opaque nonpolar phase having a viscosity in the range of 20-9000 cps made by combining a crosslinked or partially crosslinked nonemulsifying siloxane elastomer; 0.1-70% of 1 or more low viscosity, lipophilic emollients; (b) a clear, translucent or opaque polar phase having a viscosity in the range 20-9000 cps made by combining 1 or more members selected from the group consisting of water, glycols and polyhydric alcs.; and an antiperspirant active salt which is sol. in the polar phase. The polar phase comprises (i) a sufficient amt. of water, glycols or polyhydric alcs. to dissolve or suspend the antiperspirant active, and (ii) optionally may comprise up to 30% water, up to 16.00% EtOH; up to 16% iso-PrOH; or mixts. of the foregoing; (iii) 0.1-2.5% a water sol. cationic deriv. selected from the group consisting of hydroxyethyl cellulose and its copolymers provided that the viscosity of the polar phase does not exceed 9000 cps. Thus, a non-polar phase of the compn. contained 28.0% DC 9040 (crosslinked silicone elastomer), 18.0% pentameric cyclomethicone (DC 245 Fluid), 3.0% Cll-12 isoparaffin (Isopar H), and 1.0% polyoxypropylene myristyl ether (Promyristyl PM3). The polar phase contained 50.0% Al Zr tetrachlorohydrex gly (30% active in propylene glycol) (AZP 908 PG 30). Two transparent phases were formed with a suitable viscosity to flow through a wide ball roll-on package. No product did not exhibit any leakage.

REFERENCE 8

137:252727 CA AN

Use of fibers as anti-irritants in cosmetic or dermatological compositions TΙ

Creton, Isabelle IN

L'oreal, Fr. PA

Eur. Pat. Appl., 14 pp. SO

CODEN: EPXXDW

DTPatent

French

FAN.	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI	EP 1243250	A1 20020925	EP 2002-290535	
	R: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IT, LI, LU,	, NL, SE, MC, PT,
	IE, SI,	LT, LV, FI, RO, MK,	CY, AL, TR	
	FR 2822377	A1 20020927	FR 2001-3956	20010323
	US 2002182238	A1 20021205	US 2002-101061	20020320
	JP 2002293718	A2 20021009	JP 2002-81958	20020322
PRAI	FR 2001-3956	20010323		

Fibers are used as anti-irritants in a cosmetic or dermatol. compns. A cosmetic oil/in/water emulsion contained glycerin 7, sodium EDTA 0.05, salicylic acid 2, triethanolamine 2.05, cetearyl alc. 1.2, Oleth-12 0.3, stearyl alc. 1, glyceryl stearate/PEG-100 stearate 2.5, hydrogenated polyisobutene 3, octylmethoxycinnamate 5, acrylates-dimethicone copolymer 0.6, perfume 0.5, cyclopentasiloxone 7, octoxyglycerin 0.5, sepigel-305 0.7, polyamide fiber 8, modified starch 8, phenoxyethanol/paraben q.s., and water q.s. 100%.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

REFERENCE 9

137:37412 CA AN

Cosmetic composition containing 7-hydroxy dhea and/or 7-keto dhea and at TIleast an antimicrobial agent

Picard-Lesboueyries, Elisabeth IN

PA L'oreal, Fr.

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SO
     PCT Int. Appl., 22 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     French
FAN.CNT 1
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
     _____
                                           ______
                      A1
                                          WO 2001-FR3775
                                                              20011129
     WO 2002047652
                            20020620
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                           FR 2000-16435 20001215
                            20020621
     FR 2818134
                      A1
                             20030124
     FR 2818134
                       В1
                                          AU 2002-22073
                                                              20011129
                       A5
                             20020624
     AU 2002022073
PRAI FR 2000-16435
                      20001215
     WO 2001-FR3775
                      20011129
AΒ
     The invention concerns a compn. contg., in a physiol. acceptable medium:
     (a) at least a dehydroepiandrosterone (DHEA) deriv. selected among
     7-hydroxy DHEA and 7-keto DHEA, and (b) at least an antimicrobial agent.
     The invention also concerns the cosmetic use of said compn. for preventing
     or treating skin disorders such as greasy skin with acne susceptibility,
     acne, scalp dandruff and bad odors. A gel for bad odor contained Pemulen
     TR1 0.5, hexyldecanol 10, isononyl isononanoate 10, 7-OH DHEA 0.3,
     triethanolamine 1.0, glycerin 6, zinc oxide 0.5, Sepigel-305 0.5, octyl
     methoxycinnamate 1, titanium oxide 0.5, and water q.s. 100%.
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 5
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
REFERENCE 10
AN
     137:10750 CA
TΙ
     Citral acetals with lemon aroma
     Tanaka, Sakuya; Tanaka, Shigeyoshi; Akiba, Shunichi; Ara, Katsutoshi;
IN
     Ishida, Hirohiko
PA
     Kao Corporation, Japan
SO
     U.S. Pat. Appl. Publ., 13 pp.
     CODEN: USXXCO
DT
     Patent
     English
FAN.CNT 1
                                                              DATE
     PATENT NO.
                     KIND DATE
                                            APPLICATION NO.
     _____
                                            -----
                      A1 20020606
                                            US 2001-973017
                                                              20011010
PΙ
     US 2002068075
     US 6506793
                      B2
                            20030114
                                           JP 2001-247094
                                                              20010816
     JP 2002234887
                      A2
                            20020823
PRAI JP 2000-312869 20001013
     The present invention provides a citral acetal capable of sustaining a
     lemon aroma unique to citral and a perfume compn. comprising the citral
     acetal, as well as an LDH (leucine dehydrogenase) inhibitor and a
     deodorant, cosmetics and a skin agent for external application, comprising
     the LDH inhibitor. The citral acetals (I): wherein the wavy line
     represents a cis and/or trans form, and R represents a C1-9 linear or
     branched alkyl group. One example compd. prepd. was citral pentyl glyceryl ether acetal. This and other ethers emitted a lemon aroma and
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also showed LDH inhibiting activity.

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